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DATE: Tuesday, December 05, 2006

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| | | <i>DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR</i> | |
| <input type="checkbox"/> | L15 | L14 and (earl\$4 soon time) near5 infection same (core or capsid or nucleocapsid or C with (antigen protein)) | 38 |
| <input type="checkbox"/> | L14 | (HCV or NANBV or NANB adj virus or hepatitis adj C) same (core or capsid or nucleocapsid or C with (antigen protein)) and (detect\$ or diagno\$) with (early soon time) near5 infection | 176 |
| <input type="checkbox"/> | L12 | L11 and l10 | 32 |
| <input type="checkbox"/> | L11 | L3 and @py<1992 | 215 |
| <input type="checkbox"/> | L10 | L9 and L7 | 49 |
| <input type="checkbox"/> | L9 | L3 and @py<1995 | 372 |
| <input type="checkbox"/> | L8 | L3 and @pd<1995 | 0 |
| <input type="checkbox"/> | L7 | L3 and (NANB or NANBV or Hepatitis adj C or HCV or hepatitis) | 2427 |
| <input type="checkbox"/> | L4 | L3 and @pd<1992 | 0 |
| <input type="checkbox"/> | L3 | Immunofluorescence with assay | 7364 |

END OF SEARCH HISTORY

5711

L1 103 (HCV OR NANBV OR NANB (A) (VIRUS OR HEPATITIS) OR HEPATITIS
(2A) C) (S) (CAPSID OR CORE OR NUCLEOCAPSID) AND (CAPSID OR
CORE OR NUCLEOCAPSID) (S) EARLY (S) (ANTIBOD OR SEROCONVER? OR
INFECT?)

(FILE 'HOME' ENTERED AT 16:16:02 ON 05 DEC 2006)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 16:16:55 ON
05 DEC 2006

L1 103 S (HCV OR NANBV OR NANB (A) (VIRUS OR HEPATITIS) OR HEPATITIS (
L2 39 DUP REM L1 (64 DUPLICATES REMOVED)

L2 ANSWER 1 OF 39 MEDLINE on STN DUPLICATE 1
 AN 2006149888 MEDLINE
 DN PubMed ID: 16505558
 TI Utility of HCV core antigen ELISA in the screening for hepatitis C virus infection in patients on hemodialysis.
 AU Reddy A K; Dakshinamurthy K V; Lakshmi V
 CS Department of Microbiology, Nizam's Institute of Medical Sciences, Hyderabad - 500 082, Andhra Pradesh, India.
 SO Indian journal of medical microbiology, (2006 Jan) Vol. 24, No. 1, pp. 55-7.
 Journal code: 8700903. ISSN: 0255-0857.
 CY India
 DT (EVALUATION STUDIES)
 Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200605
 ED Entered STN: 17 Mar 2006
 Last Updated on STN: 11 May 2006
 Entered Medline: 10 May 2006
 AB An enzyme immuno assay for hepatitis C core antigen was recently developed and its performance was compared with that of the hepatitis C virus (HCV) RNA in the screening of HCV infection in patients on hemodialysis. One hundred and eleven chronic renal failure patients undergoing haemodialysis between May 2003 and October 2004 were included in the study. All the patients were tested for anti HCV antibody, core antigen and RNA. Fifteen patients were anti HCV antibody positive, three patients were positive for HCV core antigen and RNA, three patients were positive for HCV RNA, while two patients were positive only for core antigen but negative for RNA. In anti HCV antibody positive patients, the core antigen was negative while the viral RNA continued to be present. Hence, relying solely on a single HCV core antigen assay may not be useful for a definite diagnosis of early HCV infection. The sensitivity and specificity of the assay were 60% and 83% respectively, while the positive predictive value was 14.3%, negative predictive value was 97.7% and the efficiency was 81.9%.

L2 ANSWER 2 OF 39 MEDLINE on STN DUPLICATE 2
 AN 2005417418 MEDLINE
 DN PubMed ID: 16081925
 TI Simultaneous detection of hepatitis C virus (HCV) core antigen and anti-HCV antibodies improves the early detection of HCV infection
 AU Laperche Syria; Le Marrec Nadine; Girault Annie; Bouchardeau Francoise; Servant-Delmas Annabelle; Maniez-Montreuil Michele; Gallian Pierre; Levayer Thierry; Morel Pascal; Simon Nicole
 CS National Reference Center for Hepatitis B and C in Transfusion, Institut National de la Transfusion Sanguine, 6 rue Alexandre-Cabanel, 75015 Paris, France.. slaperche@ints.fr
 SO Journal of clinical microbiology, (2005 Aug) Vol. 43, No. 8, pp. 3877-83.
 Journal code: 7505564. ISSN: 0095-1137.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200509
 ED Entered STN: 6 Aug 2005
 Last Updated on STN: 16 Sep 2005
 Entered Medline: 15 Sep 2005

AB To evaluate whether a new enzyme immunoassay developed for the simultaneous detection of hepatitis C virus (HCV) core antigen (Ag) and anti-HCV antibodies (anti-HCV Ab) (Monolisa HCV Ag/Ab ULTRA; Bio-Rad) could improve the early detection of HCV infection, we compared its sensitivity to that of anti-HCV , HCV core Ag, and HCV RNA assays. The populations studied included 12 blood donor samples positive for HCV RNA and HCV core Ag but negative for anti-HCV antibodies and 23 hemodialysis patients who developed anti-HCV Ab (seroconversion) during the follow-up. From these 23 individuals, 83 samples sequentially collected prior to seroconversion and 108 samples collected after seroconversion were tested. Six of 12 blood donations were positive by the HCV Ag/Ab assay. In the hemodialysis cohort, the 24 HCV RNA-negative samples were negative by the HCV Ag/Ab assay and 23 of the 59 HCV RNA-positive samples (39%) were positive. The HCV Ag/Ab assay detected HCV infection on average 21.6 days before the most sensitive antibody assay. The HCV Ag/Ab assay did not detect HCV infection as early as the HCV RNA assay (mean delay, 30.3 days) or HCV Ag assay (mean delays, 27.9, and 16.3 days by the HCV core Ag quantification assay and the HCV Ag blood screening assay, respectively). This new assay provides a notable improvement for the early detection of HCV infection during the so-called window period compared with anti-HCV Ab assays and could be a useful alternative to HCV RNA detection or HCV core Ag assays for diagnosis or blood screening when nucleic acid technologies or HCV core Ag detection are not implemented.

L2 ANSWER 4 OF 39 MEDLINE on STN DUPLICATE 3
AN 2005585375 MEDLINE
DN PubMed ID: 16254976
TI Evaluation of a total core antigen assay for the diagnosis of hepatitis C virus infection in hemodialysis patients.
AU Bouzgarrou N; Fodha I; Othman S Ben; Achour A; Grattard F; Trabelsi A; Pozzetto B
CS Laboratory of Molecular Immuno-Oncology, Faculty of Medicine, Monastir, Tunisia.. nadia.bouzgarrou@lycos.com
SO Journal of medical virology, (2005 Dec) Vol. 77, No. 4, pp. 502-8. Journal code: 7705876. ISSN: 0146-6615.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200601
ED Entered STN: 3 Nov 2005
Last Updated on STN: 18 Jan 2006
Entered Medline: 17 Jan 2006
AB Hemodialysis patients are recognized as a group at high risk of infection with hepatitis C virus (HCV). Therefore, such a population should be screened routinely for the presence of HCV viremia. Since nucleic acid techniques remain expensive and largely unavailable in many laboratories in the developing world, the present study assesses the clinical usefulness of the HCV core antigen enzyme immunoassay for the diagnosis of HCV infection in dialysis patients. One hundred seventy-five dialysis patients were screened for the presence of anti-HCV antibodies and HCV RNA in the serum. One hundred twenty-eight serum samples were collected from the 76 patients who were anti-HCV antibody- and/or HCV RNA-positive. These were evaluated for total HCV core antigen. Of these samples, 55 had sufficient volume to be further tested to quantify HCV RNA by reverse transcription polymerase chain reaction (RT-PCR). Genotyping of the HCV strains showed

that the majority belonged to genotype 1b (77%). The HCV core antigen assay showed a sensitivity and specificity of 84% and 89%, respectively. The use of core antigen assay has enabled the early detection of three patients who developed an acute hepatitis C infection during the period of study. A correlation study was undertaken between the quantitative values of viral load, expressed as pg/ml of HCV core antigen in serum, and viral RNA in UI/ml. A significant correlation was observed (Pearson's correlation coefficient: 0.552; $P < 0.001$). In conclusion, detection of HCV core antigen in serum is an inexpensive, reliable, and highly specific assay that can be useful in most laboratory settings to diagnose HCV infection, and especially in laboratories where nucleic acid technologies are not yet available.

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L2 ANSWER 8 OF 39 MEDLINE on STN DUPLICATE 5
 AN 2005026858 MEDLINE
 DN PubMed ID: 15653411
 TI The role of core antigen detection in management of hepatitis C: a critical review.
 AU Seme Katja; Poljak Mario; Babic Dunja Z; Mocilnik Tina; Vince Adriana
 CS Medical Faculty, Institute of Microbiology and Immunology, Zaloska 4, 1000 Ljubljana, Slovenia.
 SO Journal of clinical virology : the official publication of the Pan American Society for Clinical Virology, (2005 Feb) Vol. 32, No. 2, pp. 92-101. Ref: 70
 Journal code: 9815671. ISSN: 1386-6532.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 LA English
 FS Priority Journals
 EM 200503
 ED Entered STN: 19 Jan 2005
 Last Updated on STN: 23 Mar 2005
 Entered Medline: 22 Mar 2005
 AB Several assays in research format and two commercial assays for the detection of hepatitis C virus (HCV) core protein or HCV core antigen have been developed in recent years. In order to elucidate the role and significance of HCV core antigen detection in the diagnosis and management of hepatitis C, we reviewed 56 studies published in peer-reviewed journals until September 2004. Evaluations in transfusion settings showed that the HCV core antigen assay detects HCV infection, similarly as nucleic acid techniques (NAT), between 40 and 50 days earlier than the current third generation HCV antibody screening assays. HCV core antigen levels closely track HCV RNA dynamics, and allow clinical monitoring of a patient's therapy, independently of HCV genotype, however, mainly in the samples with HCV RNA levels above 20,000 IU/ml. Considering the lower sensitivity of HCV core antigen detection in comparison to NAT, the HCV core antigen assay is not practical for the determination of the end of treatment response and sustained viral response, but could be useful for the determination of early viral response in the pegylated interferon-alpha and ribavirin treated patients infected with HCV genotype 1. The HCV core antigen detection is a viable tool for study of hepatitis C pathogenesis. The HCV core antigen can be used as a marker of HCV replication in anti-HCV positive individuals in the areas of the world that cannot afford NAT and/or in the settings that are not equipped

or competent to perform HCV RNA testing. Because the manufacturer of HCV core antigen assays recently stopped an active marketing of these assays in several countries, it will, unfortunately and probably, never be possible to determine the actual potential and usefulness of HCV core antigen testing in the management of hepatitis C.

L2 ANSWER 10 OF 39 MEDLINE on STN
AN 2005094258 MEDLINE
DN PubMed ID: 15724394
TI Recent approach for diagnosis of early HCV infection.
AU el-Sayed Zaki Maysaa; el-Adrosy Hala
CS Department of Clinical Pathology, Mansoura University, Egypt.
SO The Egyptian journal of immunology / Egyptian Association of Immunologists, (2004). Vol. 11, No. 1, pp. 123-9.
Journal code: 9816016. ISSN: 1110-4902.
CY Egypt
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200504
ED Entered STN: 24 Feb 2005
Last Updated on STN: 27 Apr 2005
Entered Medline: 26 Apr 2005
AB Detection of HCV infection during the window phase of infection, before seroconversion, is important in blood screening. However, a significant delay exists between the time of infection and the development of antibodies. The delay in window period can last up to 70 days. The aim of the present study was to investigate the kinetics of HCV markers during early infection, with detection of HCV core antigen as an early method for diagnosis. The study included determination of HCV RNA by qualitative and quantitative PCR, HCV core antigen detection by enzyme linked immunosorbent assay (ELISA) and specific serological markers including anti-HCV IgG and IgM. The study was carried out on 34 patients diagnosed as non A non B acute hepatitis and proved to be hepatitis C by qualitative HCV RNA PCR. Sixteen healthy control subjects were also included. From each consenting patient and control, blood samples were collected and serum was separated and subjected to determination of AST and ALT and the following virological laboratory tests: HCV core antigen detection by ELISA, determination of specific anti-HCV IgM and specific anti-HCV IgG, qualitative and quantitative determination of HCV RNA by second version of PCR. In patients, the median quantity of HCV RNA was $739.1 \times 10(3)$ lu/ml with minimum quantity $2.1 \times 10(3)$ lu/ml and maximum $38352.3 \times 10(3)$ lu/ml. A comparison between the different diagnostic methods revealed that the highest sensitivity was for HCV-core antigen detection (82.4%), specificity was 100% negative predictive value was 72.2% and positive predictive value was 100%. Specific anti-HCV IgG had moderate levels of sensitivity (58.5%), specificity (75%), negative predictive value (46.2%) and positive predictive value (83.3%). The least sensitive method was the specific anti-HCV IgM (29.4%) with negative predictive value 40% but had specificity and positive predictive value of 100% of each. From this study we could conclude the followings: From virological methods, serological detection of specific IgM anti-HCV had the least sensitivity limits, while it had the highest specificity and positive predictive value. Specific anti-HCV IgG had moderate sensitivity and specificity. The most sensitive and specific tool for diagnosis of early HCV viraemia was the detection of HCV core Ag by ELISA when compared to molecular biological methods.

L2 ANSWER 11 OF 39 MEDLINE on STN

DUPLICATE 7

AN 2003324577 MEDLINE
 DN PubMed ID: 12823757
 TI A new HCV core antigen assay based on disassociation
 of immune complexes: an alternative to molecular biology in the diagnosis
 of early HCV infection.
 AU Lapèrche Syria; Le Marrec Nadine; Simon Nicole; Bouchardeau Francoise;
 Defer Christine; Maniez-Montreuil Michele; Levayer Thierry; Zappitelli
 Jean-Pierre; Lefrere Jean-Jacques
 CS Department of Blood Transmissible Agents, National Institute of Blood
 Transfusion, Paris, France.. slaperche@ints.fr
 SO Transfusion, (2003 Jul) Vol. 43, No. 7, pp. 958-62.
 Journal code: 0417360. ISSN: 0041-1132.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200307
 ED Entered STN: 13 Jul 2003
 Last Updated on STN: 31 Jul 2003
 Entered Medline: 30 Jul 2003
 AB BACKGROUND: An EIA based on immune complex disassociation of
 nucleocapsid proteins of HCV has been developed to
 detect and quantify HCV core antigen. STUDY DESIGN
 AND METHODS: To evaluate whether this new assay (trak-C, Ortho Clinical
 Diagnostics) could be an alternative to NAT during the window period, its
 sensitivity in this context was assessed, and its performance was compared
 with that of a first-generation HCV core antigen assay
 dedicated to the blood screening (HCV core antigen
 ELISA). Studied populations included nine HCV RNA-positive, HCV
 antibody-negative blood donors and 23 hemodialysis patients who underwent
 an HCV seroconversion. From these individuals, 81 samples (23 HCV
 RNA-negative and 58 HCV RNA-positive) sequentially collected during the
 phase before seroconversion were tested. RESULTS: The nine blood donor
 samples were positive for the presence of HCV core
 antigen by the trak-C, and 6 of 8 tested were positive for the presence of
 HCV core antigen by blood screening ELISA. In the
 hemodialysis cohort, the 23 HCV RNA-negative samples were
 negative with the two HCV core antigen assays. Among
 the 58 HCV RNA-positive samples, 46 of 57 (80.7%) tested were
 positive for the presence of HCV core antigen with the
 blood screening assay, and 57 of 58 (98.2%) were positive for the presence
 of HCV core antigen with the trak-C. The mean delays
 in detecting HCV infection between trak-C and the appearance of
 HCV antibodies, between HCV RNA testing and trak-C, and
 between trak-C and HCV core antigen ELISA were 58.2,
 0.24, and 3.33 days, respectively. CONCLUSION: Trak-C was more sensitive
 than the blood screening assay and had similar performance to HCV RNA
 assay in the window period. Trak-C could constitute an alternative to NAT
 for the diagnosis of HCV infection during the window period, especially
 when molecular biology procedures cannot be implemented.

L2 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2002:927450 CAPLUS
 DN 138:23640
 TI Hepatitis C virus core antigen mimotopes and
 their use in the early detection of anti-hepatitis
 C virus antibodies in diagnosis of infection
 IN Jolivet, Reynaud Colette
 PA Biomerieux, Fr.
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DT Patent
 LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2002096929 | A2 | 20021205 | WO 2002-FR1851 | 20020531 |
| | WO 2002096929 | A3 | 20031224 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | FR 2825363 | A1 | 20021206 | FR 2001-7184 | 20010531 |
| | AU 2002314283 | A1 | 20021209 | AU 2002-314283 | 20020531 |
| PRAI | FR 2001-7184 | A | 20010531 | | |
| | WO 2002-FR1851 | W | 20020531 | | |

AB Mimotopes to monoclonal antibodies to hepatitis C virus core antigen that can be used in the diagnosis of hepatitis C infection are described. The invention also concerns the use of said polypeptide for detecting and quantifying anti-HCV antibodies or Core protein, in a biol. sample, and for obtaining antibodies. Selection and characterization of mimotopes from phage display libraries is described.

L2 ANSWER 18 OF 39 MEDLINE on STN DUPLICATE 9
 AN 2002430499 MEDLINE
 DN PubMed ID: 12186917
 TI Hepatitis C virus core protein leads to
 immune suppression and liver damage in a transgenic murine model.
 AU Soguero Carolina; Joo Myungsoo; Chianese-Bullock Kimberly A; Nguyen Duong
 Tony; Tung Kenneth; Hahn Young S
 CS Beirne Carter Center for Immunology Research, University of Virginia,
 Charlottesville, Virginia 22908, USA.
 NC DK57939 (NIDDK)
 SO Journal of virology, (2002 Sep) Vol. 76, No. 18, pp. 9345-54.
 Journal code: 0113724. ISSN: 0022-538X.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200210
 ED Entered STN: 21 Aug 2002
 Last Updated on STN: 8 Oct 2002
 Entered Medline: 2 Oct 2002
 AB Hepatitis C virus (HCV) is remarkably efficient in establishing persistent infection, possibly mediated by an impaired immune response to HCV infection. There is compelling evidence that HCV can infect immune cells, such as macrophages, B cells, and T cells. It has been previously reported that HCV core, the first protein expressed during the early phase of viral infection, contains the immunomodulatory function of suppressing host immune responses. This altered function of immune cells caused by HCV infection may explain the ineffective immune response to HCV. To further characterize the immunomodulatory role of HCV core in vivo, we generated transgenic (TG) mice by directing the expression of core protein to T lymphocytes by using the CD2 promoter. T-lymphocyte responses, including the production of gamma interferon and interleukin-2, were significantly diminished in these mice compared to their non-TG littermates. The inhibition of T-lymphocyte responsiveness may be due to the increased susceptibility of peripheral T lymphocytes to Fas-mediated

apoptosis. Surprisingly, significant lymphocyte infiltration was observed in the portal tracts of livers isolated from core TG mice, associated with increasing serum alanine aminotransferase levels. Moreover, no intrahepatic lymphocytes or liver damage was found in non-TG littermates and core TG mice bred to Fas-deficient lpr mice. These results suggest that HCV core drives liver injury by increasing Fas-mediated apoptosis and liver infiltration of peripheral T cells.

L2 ANSWER 20 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
STN DUPLICATE 11
AN 2003:2884 BIOSIS
DN PREV200300002884
TI ORTHO TOTAL HCV CORE ANTIGEN (trak-C) ASSAY can aid in
early diagnosis of patients acutely infected with
hepatitis C virus.
AU Biancone, Gregory [Reprint Author]; Bahl, Chander [Reprint Author];
Baggett, David [Reprint Author]; Mazuruk, K. [Reprint Author]; Lee,
Stephen R. [Reprint Author]; Calmann, Mark [Reprint Author]
CS Ortho-Clinical Diagnostics, Raritan, NJ, USA
SO Hepatology, (October 2002) Vol. 36, No. 4 Part 2, pp. 551A. print.
Meeting Info.: 53rd Annual Meeting on the Liver. BOSTON, MA, USA. November
01-05, 2002.
ISSN: 0270-9139 (ISSN print).
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 18 Dec 2002
Last Updated on STN: 18 Dec 2002

L2 ANSWER 26 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
STN DUPLICATE 16
AN 2001:543043 BIOSIS
DN PREV200100543043
TI Monitoring of HCV infected patients in the
early phase of anti-viral therapy using a prototype HCV
core antigen ELISA.
AU Bahl, Chander [Reprint author]; Niven, Patrick [Reprint author]; Madjor,
Denise [Reprint author]; Samson, Antonio [Reprint author]; Calcagno,
Jessica [Reprint author]; Lee, Stephen R. [Reprint author]
CS Ortho Clinical Diagnostics, Raritan, NJ, USA
SO Hepatology, (October, 2001) Vol. 34, No. 4 Pt. 2, pp. 226A. print.
Meeting Info.: 52nd Annual Meeting and Postgraduate Courses of the
American Association for the Study of Liver Diseases. Dallas, Texas, USA.
November 09-13, 2001.
CODEN: HPTLD9. ISSN: 0270-9139.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 21 Nov 2001
Last Updated on STN: 25 Feb 2002

L2 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:698008 CAPLUS
DN 136:66526
TI Immunoassay systems for circulating HCV core protein
in the detection and diagnosis of HCV infection
AU Lee, Stephen R.; McHutchison, John; Fong, Tse-Ling; Niven, Patrick;
Peterson, Jon; Baggett, David; Green, George
CS Ortho Clinical Diagnostics, Raritan, NJ, USA
SO Rapport I ISTISAN (2000), 00/32, 31-34
CODEN: RAISEF; ISSN: 1123-3117

DT Report
LA English
AB The performance of ELISA in detecting early (seroneg.) infection as well as monitoring patients on various courses of hepatitis C virus (HCV) therapy was studied. There were 128 specimens from plasma donors in the early, seroneg. phase of infection that were tested for HCV RNA and for HCV core antigen by the current screening ELISA. The average viral load among the 120 antigen pos. specimens was 776,000 copies/mL (24,000-3.5 x 10⁶). The average viral load for the eight antigen neg. specimens was 44,000 copies/mL (4700-129,000). All but one of these specimens (4700 copies/mL) were detected by the prototype second generation screening ELISA. Levels of HCV core antigen correlated closely with RNA and also with viral clearance in individuals responding to therapy. The current HCV antigen screening test identified the vast majority of individuals in the antibody neg., RNA pos. "window phase" of infection. Prototype second generation tests showed greater anal. sensitivity for HCV and clin. sensitivity that was virtually the same as RNA testing. HCV core antigen could be detected with equal sensitivity in antibody pos. patients using a simple, on-step, specimen pre-treatment procedure. This test seemed to have great utility for diagnosis of HCV infection and for monitoring patients undergoing therapy.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 30 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
STN
AN 2000:375303 BIOSIS
DN PREV200000375303
TI HCV core antigen detection: Efficacy in the
early phase of HCV infection and specificity
in blood donor screening.
AU Bouchardeau, F. [Reprint author]; Maniez, M.; Le Marrec, N. [Reprint
author]; Dupressoir, M. V.; Simon, N.; Razer, A. [Reprint author];
Laperche, S. [Reprint author]; Courouze, A. M. [Reprint author]
CS Dept Virology, INTS, Paris, France
SO Vox Sanguinis, (July, 2000) Vol. 78, No. Suppl. 1, pp. P472. print.
Meeting Info.: 26th Congress of the International Society of Blood
Transfusion. Vienna, Austria. July 09-14, 2000. International Society of
Blood Transfusion.
CODEN: VOSAAD. ISSN: 0042-9007.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 6 Sep 2000
Last Updated on STN: 8 Jan 2002

L2 ANSWER 31 OF 39 MEDLINE on STN DUPLICATE 19
AN 2000230081 MEDLINE
DN PubMed ID: 10765142
TI Detection of hepatitis C core antigen in the
antibody negative 'window' phase of hepatitis C
infection.
AU Peterson J; Green G; Iida K; Caldwell B; Kerrison P; Bernich S; Aoyagi K;
Lee S R
CS Ortho Clinical Diagnostics, Raritan, NJ 08869, USA.
SO Vox sanguinis, (2000) Vol. 78, No. 2, pp. 80-5.
Journal code: 0413606. ISSN: 0042-9007.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200007

ED Entered STN: 10 Aug 2000
 Last Updated on STN: 8 Oct 2002
 Entered Medline: 24 Jul 2000

AB BACKGROUND AND OBJECTIVES: Despite improvements in assays for anti-HCV, there remains a significant delay before the appearance of antibodies following infection, during which, circulating viral RNA is present. We have evaluated a prototype assay for the serological detection of hepatitis C virus (HCV) core antigen with specimens derived from the early phase of HCV infection. MATERIALS AND METHODS: Serial specimens from 24 individuals undergoing HCV seroconversion were tested for the presence of anti-HCV, HCV RNA and HCV core antigen. RESULTS: HCV antigen was detected at the same time as HCV RNA in 83% (20/24) cases. The mean time to the first detection of HCV antigen was approximately 1 day later than HCV RNA. Overall, 87% of HCV-RNA-positive specimens contained detectable HCV core antigen. CONCLUSION: These results indicate that HCV core antigen can be identified by routine serological ELISA in specimens from the early antibody-negative phase of HCV infection. A test for HCV core antigen may be a useful test for identifying window phase blood donations from antibody negative donors infected with HCV.

L2 ANSWER 32 OF 39 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN
 AN 2000:889888 SCISEARCH
 GA The Genuine Article (R) Number: 364CN
 TI Dynamics of circulating HCV core antigen and HCV RNA in the early phase of HCV infection
 AU Baggett D W (Reprint); Moroney S; Saewert M; Jaczko B; Zelechowski J; Bahi C; Kostareva I; Giordano-Schmidt D; Peterson J; Green G A; De Leys R; Lee S R
 CS Ortho Clin Diagnost, Raritan, NJ USA
 CYA USA
 SO TRANSFUSION, (OCT 2000) Vol. 40, No. 10, Supp. [S], pp. 26S-26S.
 ISSN: 0041-1132.
 PB AMER ASSOC BLOOD BANKS, 8101 GLENBROOK RD, BETHESDA, MD 20814-2749 USA.
 DT Conference; Journal
 LA English
 REC Reference Count: 0
 ED Entered STN: 2000
 Last Updated on STN: 2000

L2 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1998:482243 CAPLUS
 DN 129:258679
 TI Clinical application of hepatitis C virus core protein in early diagnosis of acute hepatitis C
 AU Kobayashi, Masakazu; Tanaka, Eiji; Matsumoto, Akihiro; Yoshizawa, Kaname; Imai, Haruhiko; Sodeyama, Takeshi; Kiyosawa, Kendo
 CS Second Department of Internal Medicine, Shinshu University School of Medicine, Matsumoto, 390-0802, Japan
 SO Journal of Gastroenterology (1998), 33(4), 508-511
 CODEN: JOGAET; ISSN: 0944-1174
 PB Springer-Verlag Tokyo
 DT Journal
 LA English
 AB A fluorescence enzyme immunoassay (FEIA) for the quant. measurement of hepatitis C virus (HCV) core protein has recently been developed. In this study, we studied the clin. usefulness of this measurement in patients with acute hepatitis C. Eighteen patients with post-transfusion acute hepatitis C were enrolled in the study; 5 patients showed resolution of hepatitis with disappearance of

HCV viremia, while the remaining 13 patients did not. A second generation HCV antibody, HCV RNA, and HCV core protein were measured in serial serum samples taken within 1 mo of the onset of acute hepatitis and 3, 6, 12, 24, and 36 mo after onset. Within the first month after disease onset, the positivity rates of HCV RNA (100%) and HCV core protein (89%) were both significantly higher than that of HCV antibody (56%). Six months after disease onset, the positivity rate of HCV antibody had increased, to 100%, and the positivity rates of HCV RNA and HCV core protein began to decrease. HCV core protein levels did not differ between patients with resolved and unresolved disease in the first month after disease onset. These findings indicate that FEIA, a simple assay, for the measurement of HCV core protein was useful for the early diagnosis of acute hepatitis C.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 35 OF 39 MEDLINE on STN DUPLICATE 20
AN 1998391509 MEDLINE
DN PubMed ID: 9725670
TI Characterization of the structural proteins of hepatitis C virus expressed by an adenovirus recombinant.
AU Seong Y R; Lee C H; Im D S
CS Gene Therapy Research Unit, Korea Research Institute of Bioscience and Biotechnology, Taejeon, South Korea.
SO Virus research, (1998 Jun) Vol. 55, No. 2, pp. 177-85.
Journal code: 8410979. ISSN: 0168-1702.
CY Netherlands.
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199811
ED Entered STN: 6 Jan 1999
Last Updated on STN: 8 Oct 2002
Entered Medline: 25 Nov 1998
AB Human adenoviruses have been used for mammalian expression vectors and recombinant vaccines for heterologous antigens. We constructed and characterized an infectious adenovirus recombinant containing core -E1-E2 genes of hepatitis C virus (HCV). The core protein was produced mainly during the early phase of viral infection. Expression of HCV E1 and E2 envelope proteins was detected by an immunoprecipitation with HCV-positive patient's sera. The purified E1 and E2 proteins appeared to be composed of mainly a heterodimeric form via noncovalent interaction, as previously observed in other mammalian expression systems. A small portion of E1 and E2 monomers as well as E1E2 aggregates by interdisulfide linkage were detected. Apparently heterodimeric E1E2 complexes were serologically reactive. The results suggest that adenovirus is an useful HCV antigen-expression vector.

SWER 37 OF 39 MEDLINE on STN
AN 95228522 MEDLINE
DN PubMed ID: 7536148
TI A study on the patterns of early specific antibody response in patients with posttransfusion hepatitis C.
AU Hao F; Li M D
CS Department of Infectious Diseases, First Hospital, Third Military Medical University, Chongqing.
SO Zhonghua nei ke za zhi [Chinese journal of internal medicine], (1994 Sep) Vol. 33, No. 9, pp. 593-6.
Journal code: 16210490R. ISSN: 0578-1426.
CY China

DT Journal; Article; (JOURNAL ARTICLE)

LA Chinese

FS Priority Journals

EM 199505

ED Entered STN: 24 May 1995

Last Updated on STN: 29 Jan 1996

Entered Medline: 12 May 1995

AB Techniques of enzyme-linked immunosorbent assay based on synthetic multiple peptide fragments and second generation recombinant immunoblot assay (RIBA) were used to study the patterns of specific antibody response in 10 cases of posttransfusion hepatitis (PTH) during a period of 36-38 weeks after blood transfusion. Nine cases were positive with serum anti-HCV, including 8 cases positive with serum HCV-RNA. Antibodies to core protein of HCV showed a higher positive rate and were detected 1-3 weeks earlier than those to the putative nonstructural (NS) protein. Anti-HCV IgM to core protein were detected 1-4 weeks earlier than anti-HCV IgG and the detective absorbent values of anti-HCV IgM were positively correlated with the levels of serum ALT ($P < 0.01$). "Passive transfer" of anti-HCV were found in 3 cases. These facts suggest that HCV is the major causative agent of PTH cases in our district and anti-HCV IgM to core protein is a putative serological marker not only for early diagnosis of HCV infection but also for demonstration of active HCV infection.

L2 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:694247 CAPLUS

DN 121:294247

TI Cloning and overexpression of the highly immunogenic region of HCV genome from Korean patients

AU Cho, Young Gyu; Yi, Min Kyung; Jang, Kyung Lib; Kim, Chang Min; Sung, Young Chul

CS Dep. Life Sci., Pohang Univ. Sci. Technol., Pohang, 790-600, S. Korea

SO Molecules and Cells (1993), 3(4), 407-17

CODEN: MOCEEK; ISSN: 1016-8478

DT Journal

LA English

AB Core, NS3 and NS4 regions of hepatitis C virus (HCV) genome, which are known to be highly immunodominant regions, were obtained from sera of Korean chronic hepatitis patients by a reverse transcriptase-polymerase chain reaction (RT-PCR) method. Comparison of nucleotide sequences and their deduced amino acid sequences of the obtained clones with those of other major HCV isolates showed that there were at least two types of HCV genome in Korea and that the authors HCV isolates were more closely related to the Japanese isolates, type II and type III, than the U.S. prototype. The core, NS3 and NS4 regions were overexpressed and purified as the form of fusion proteins as well as chimeric polyproteins by using a prokaryotic expression-purification system. These proteins showed the high immunoreactivity with antibodies in sera of non-A, non-B hepatitis (NANBH) patients. In particular, a chimeric polyprotein containing core, NS3 and NS4 region, appears to show the highest immunoreactivity, indicating that it may be a good substrate for accurate and/or early detection of HCV infection in Korean patients..